LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES

OFFICE OF FISHERIES
INLAND FISHERIES SECTION

PART VI -B

WATERBODY MANAGEMENT PLAN SERIES

BAYOU DESIARD

WATERBODY EVALUATIONS &
RECOMMENDATIONS

CHRONOLOGY

DOCUMENT SCHEDULED TO BE UPDATED ANNUALLY

January 2008 – Prepared by
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Edited and Updated November 2009

Revised October 2012
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Revised February 2015
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WATERBODY EVALUATION

STRATEGY STATEMENT

Recreational

Sportfish species are managed for a sustainable population while providing anglers the opportunity to catch or harvest numbers of fish adequate to maintain angler interest and efforts.

Commercial

Commercial species of fish are managed to provide a sustainable population.

Species of Special Concern

No threatened or endangered species have been observed in Bayou DeSiard. No invasive fish species have been recorded.

EXISTING HARVEST REGULATIONS

Recreational

All state regulations apply to Bayou DeSiard. Recreational fishing regulations may be viewed at the link: http://www.wlf.louisiana.gov/fishing/regulations

Commercial

Commercial fishing regulations may be viewed at the link:
http://www.wlf.louisiana.gov/fishing/regulations

Species of Special Concern

None

SPECIES EVALUATION

Recreational

Largemouth Bass

Relative abundance, size distribution and size structure indices-

Electrofishing is the standard sampling method used to estimate various parameters of the largemouth bass (LMB) population, especially abundance and size distribution. Standardization of sampling and analysis of numerous samples performed over an extended time period are necessary for reliable estimates of relative abundance. Largemouth bass are targeted as a species indicative of the overall condition of fish communities due to their high position in the food chain. One point of consideration related to electrofishing is that larger size groups of bass are typically under-represented in the samples. Gill net sampling is employed in an effort to collect these larger individuals. Figure 1 displays the average catch

rate of largemouth bass collected during spring electrofishing. The sample sites consist of 2 stations north of the fish hatchery bridge and 4 stations south of the bridge. Fisheries habitat north of the hatchery bridge is considered to be impaired due to overabundant vegetation, shallow depths, dense stands of trees, and a thick layer of organic detritus substrate. Poor water quality is also the result of the aforementioned impairments. Habitat south of the fish hatchery bridge is generally deeper, has fewer trees, reduced amounts of vegetation and has substrate better suited for sportfish spawning. Electrofishing samples for Bayou DeSiard are now conducted in the spring and fall of every third year. Samples are timed at 900 seconds and are conducted at designated stations.

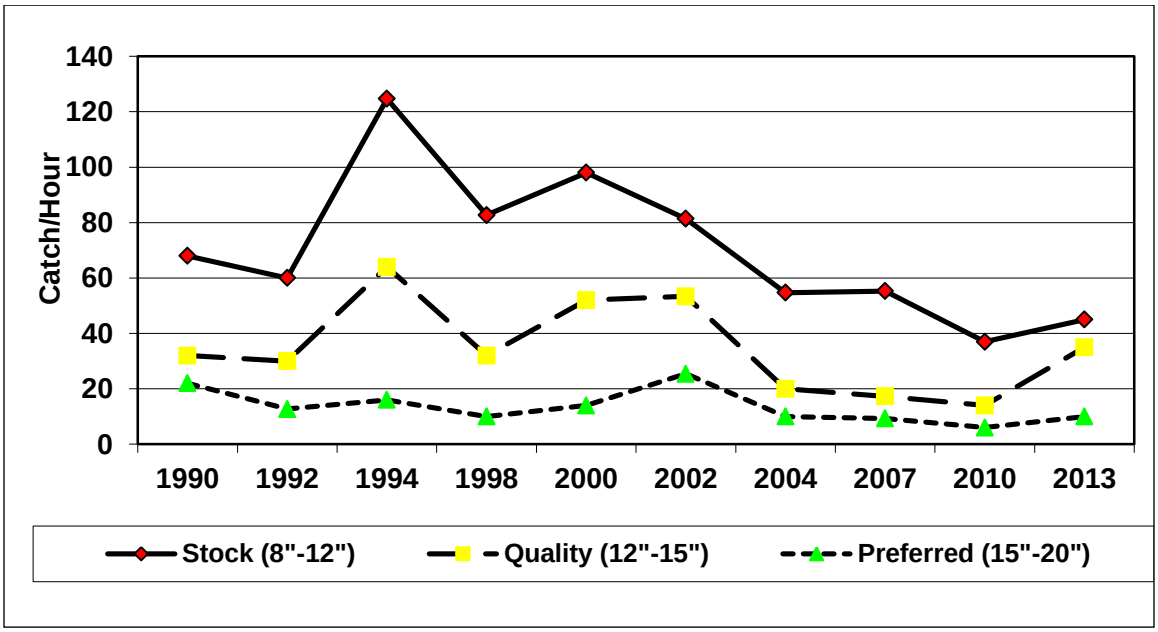

Figure 1. Catch per unit effort for stock-, quality-, and preferred-size largemouth bass from Bayou DeSiard, LA spring electrofishing samples from 1990 – 2013.

Overall, the CPUE trends were the same for each size class each year. Electrofishing CPUE values are variable among waterbodies. The values for Bayou DeSiard are considered "average", even though the majority of the fish sampled came from 4 of 6 stations (see the charts in the Condition Imbalance/Problems section below). Only four stations were sampled in 2010 and 2013, with only one being north of the hatchery bridge. Catch per unit effort for the 2004 - 2013 electrofishing samples remained slightly below the long-term average for all size classes. The increased CPUE in 1994 can be attributed to an unusually high sample from electrofishing station 5, which includes a constricted area at the end of a section on the lower half of Bayou DeSiard at the Hwy. 165 crossing. At times, great concentrations of forage and bass will congregate in this location.

Charts portraying a significant difference in mean CPUE between stations in the upper and lower end are included in Figures 2 and 3. The cause of lower CPUE samples in '04 and '07 is unknown, but could possibly be attributed to sampling variance due to influences including weather, water quality, or vegetation abundance. In 2010, the CPUE for the single upper

station sampled was 80, whereas the mean of the three lower stations was 45.3. The CPUE values for that sample represent a reversal from the values portrayed in Figure 2.

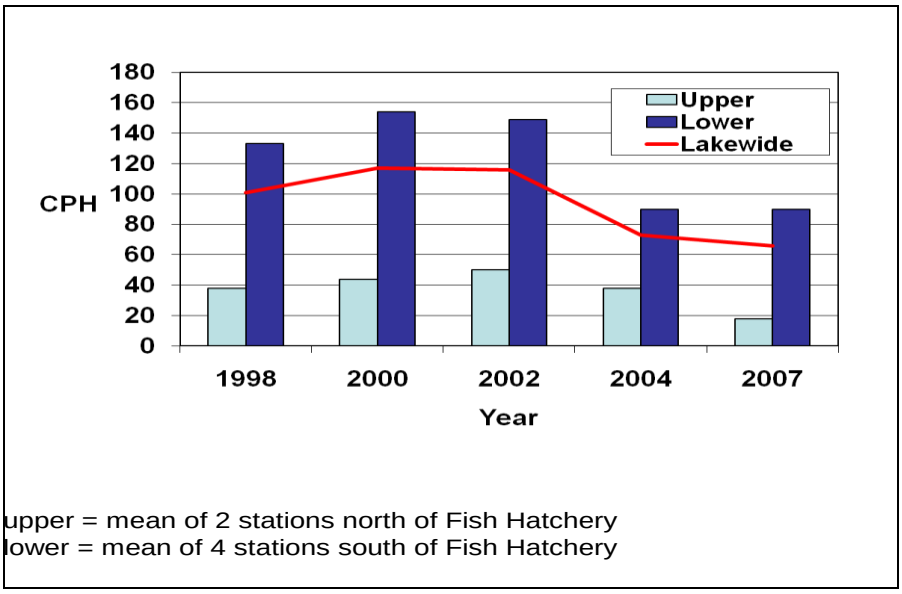

Figure 2. Bayou DeSiard spring electrofishing mean CPUE values for electrofishing sampling stations above and below the fish hatchery bridge from 1998 – 2007.

The CPUE for largemouth bass collected during spring electrofishing are listed in Figure 3 in order from north to south. The first 3 stations listed are north of the fish hatchery bridge in the portion of the bayou considered most impaired. Although sample sizes (n) are small, there is a general trend of increasing CPUE from north to south.

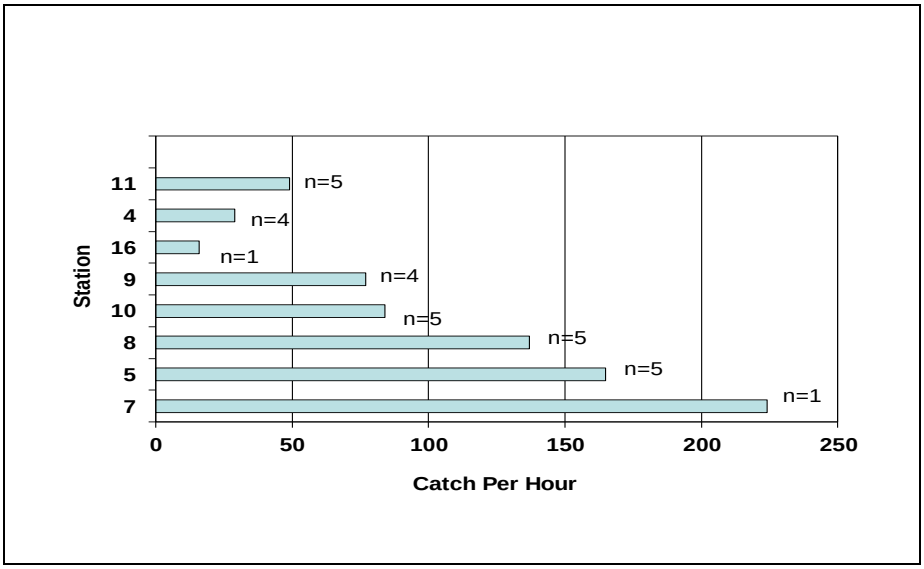

Figure 3. Mean CPUE for largemouth bass from spring electrofishing samples on Bayou DeSiard from 1998 – 2007. Sample stations are

listed in order from the northernmost to southernmost to portray habitat gradient.

The size distribution of largemouth bass collected during fall electrofishing in 2004, 2007 and 2010 are shown in Figures 4 and 5. The charts were generated from four stations sampled in 2007, 2010, and 2013, while five stations were sampled in 2004. The small difference in relative abundance between years in Figure 4 is likely caused by sampling variability. The length frequency for both years is typical of electrofishing results from a healthy bass population. The distribution of lengths indicates that reproduction has been consistent. The abnormally high numbers of bass less than 10 inches total length (TL) in 2010 (Figure 5) may be an indicator of exceptional recruitment of the 2009 cohort. Note that the 2013 length distribution (Figure 6) was obtained from the spring sample while the others were from fall samples. Only six bass were captured during the fall sample in 2013.

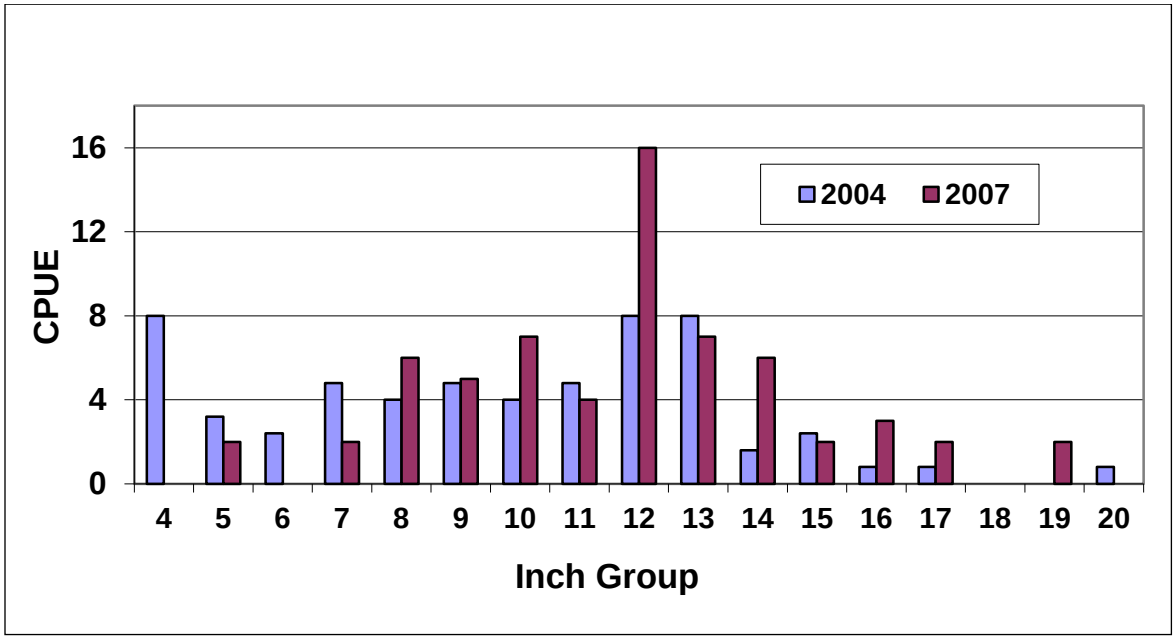

Figure 4. Catch per unit effort (bass per hour) of largemouth bass from fall electrofishing in Bayou DeSiard, LA in 2004 and 2007.

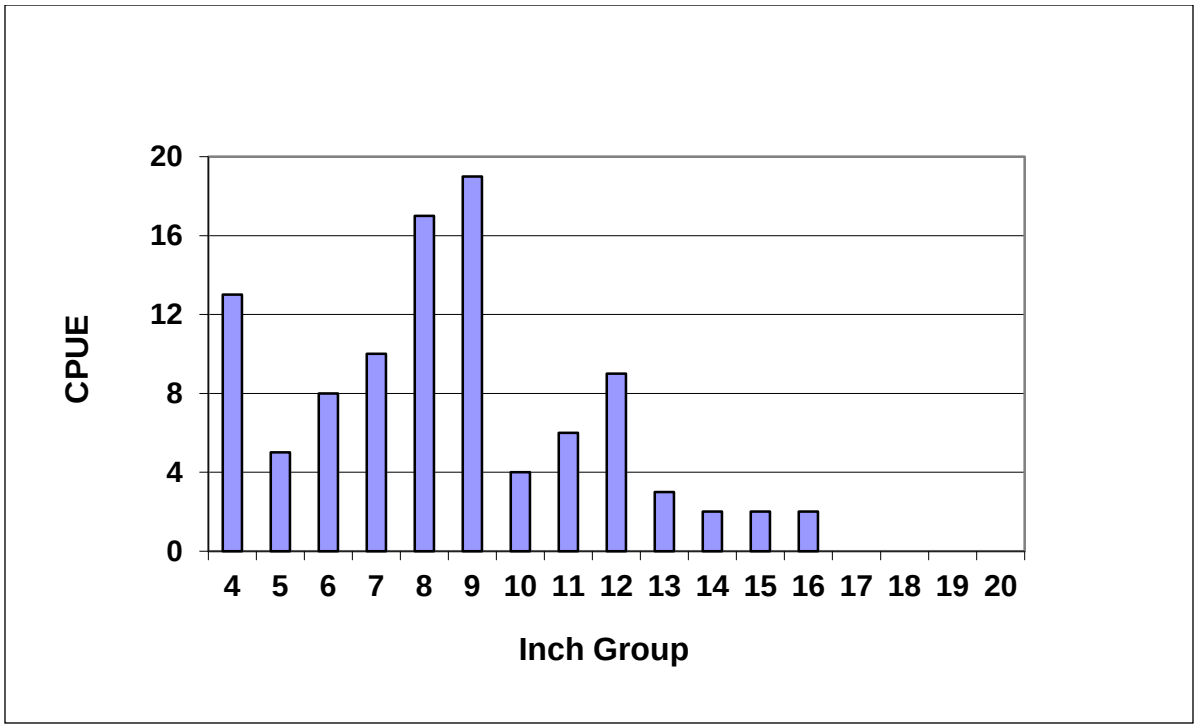

Figure 5. Catch per unit effort (bass per hour) of largemouth bass from fall electrofishing in Bayou DeSiard, LA in 2010.

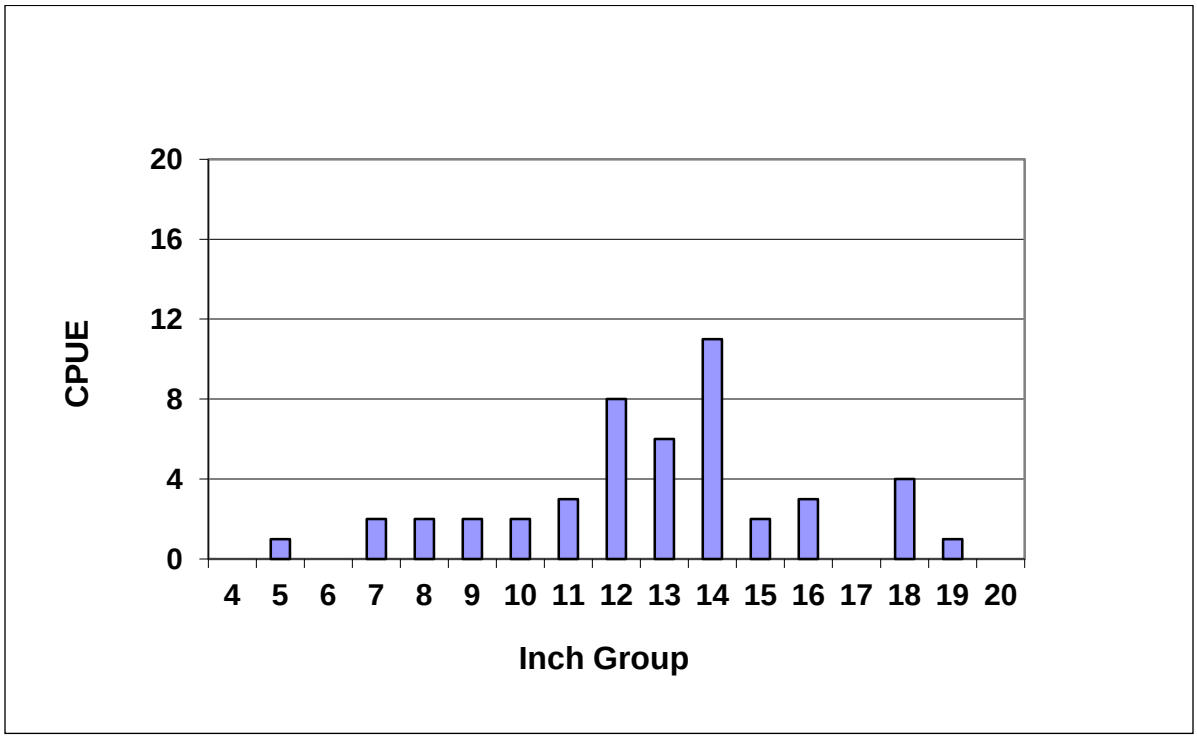

Figure 6. Catch per unit effort (bass per hour) of largemouth bass from spring electrofishing in Bayou DeSiard, LA in 2013.

Proportional stock (PSD) and relative stock density (RSD) are indices used to numerically describe length-frequency data. Proportional stock density is a percentage of the number of fish of quality size (≥12 inches for largemouth bass) to the number of fish of stock size (≥ 8 inches for largemouth bass).

$$PSD = \frac{\text{Number of bass} > 12 \text{ inches}}{\text{Number of bass} > 8 \text{ inches}} \times 100$$

A PSD value between 40 and 70 is considered normal for a balanced bass population. Values above 70 indicate a proportionally high number of bass larger than 12 inches. Values below 40 would indicate the opposite. Spring indices are usually higher than those from fall sampling for two reasons: 1) sexually mature (and generally larger) bass are more commonly associated with shallow shoreline habitat and more susceptible to capture by electrofishing, 2) Young of the year (YOY) bass are more abundant in the fall. Factors that affect real year to year changes include reproductive success, mortality, and growth rates. PSD and RSD (explained below) values are given in Figure 7 below.

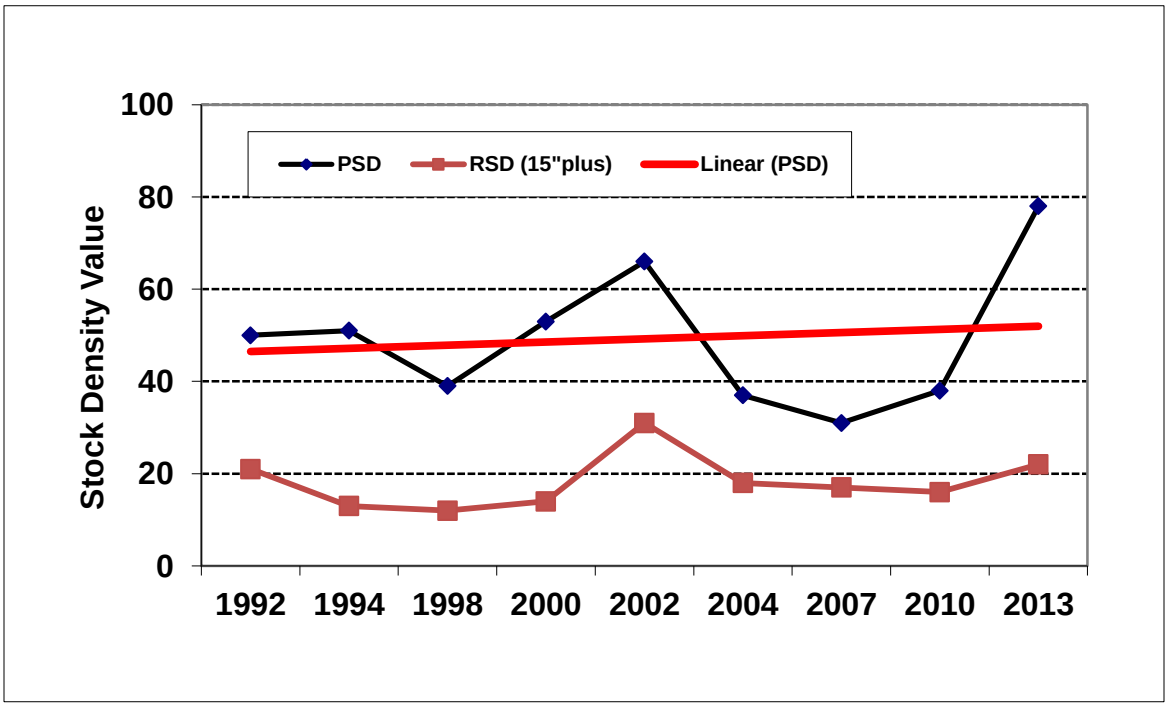

Figure 7. PSD and RSD values for largemouth bass collected during spring electrofishing in Bayou DeSiard, LA from 1992 – 2010.

The PSD value generated from spring 2007 electrofishing was 31, meaning that the ratio of bass 12 inches and larger to those 8 inches and larger was slightly skewed towards smaller fish. The trend line shows that PSD in Bayou DeSiard has been decreasing slowly since 1992. It should also be noted that the sample size of bass greater than 8 inches was 82 and 83, respectively, for 2004 and 2007, which was significantly lower than all other years. The threshold for significance listed in the Inland Fisheries sampling manual is a minimum of 100 fish. A total of 47 bass were collected in 2013, with a PSD estimate of 78 and $RSD_{preferred}$

estimate of 22. The given PSD value is typically indicative of a population with a slightly higher than average proportion of quality size (≥12 inches) bass.

Relative stock density is the percentage of fish of a designated length in a group of fish greater than the minimum stock length (8 inches). For example, RSD of preferred size (≥ 15 inches for largemouth bass) would be the percentage of 15 inch or greater fish in a sample of stock size or greater fish and is represented by RSD_{15}. The RSD_{15} values generated from spring electrofishing was 16 for 2010, and 22 for 2013. These values fall into the "accepted" range of 10 - 40. This means that 16% and 22% of 8 inch and greater bass were over 15 inches. These values appear to be close to the long term average for Bayou DeSiard. All RSD_{15} values are in the acceptable range. The spike for both values in 2002 is explained by that year having the highest catch of above stock size bass combined with the lowest catch of stock size bass from years 2000 – 2007. Water levels in Bayou DeSiard had similar fluctuations among spawning seasons from 1999-2001, with normal variance no more than 2 feet. One explanation for the high catch in 2002, could be that electrofishing was conducted at a time when many adult bass were shallow spawning, becoming more susceptible to electrofishing. This type of variation is often observed in a series of infrequent sampling results.

Largemouth Bass Genetics

Genetic analysis was conducted in 1992, three years after the initial stocking of 3,200 Florida bass fingerlings. All of the 42 bass sampled were determined to be northern genotype. Florida bass are no longer stocked into Bayou DeSiard.

Largemouth Bass Age and Growth

Mean length at capture was determined for largemouth bass from year 2000 fall electrofishing. Age is determined by removing the sagittal otoliths from 10 fish per inch group and counting the number of annuli. Sampling is conducted in the fall, when the outermost annulus is most easily seen. Figure 8 (below) shows that bass determined to be 1 year of age averaged 9.6 inches in length. Age 2 and Age 3 fish averaged 12.4 and 13.9 inches respectively. In the chart below, bass depicted as Age 1 are approximately 1.5 years old; Age 2 fish are 2.5 year old, etc... Largemouth bass in Bayou DeSiard grow at a slightly slower rate than the state average. The statewide averages for length at age in the chart were calculated from northern largemouth from throughout Louisiana. Growth rates are typically affected by forage abundance (see below), bass density, habitat quality, and genetics.

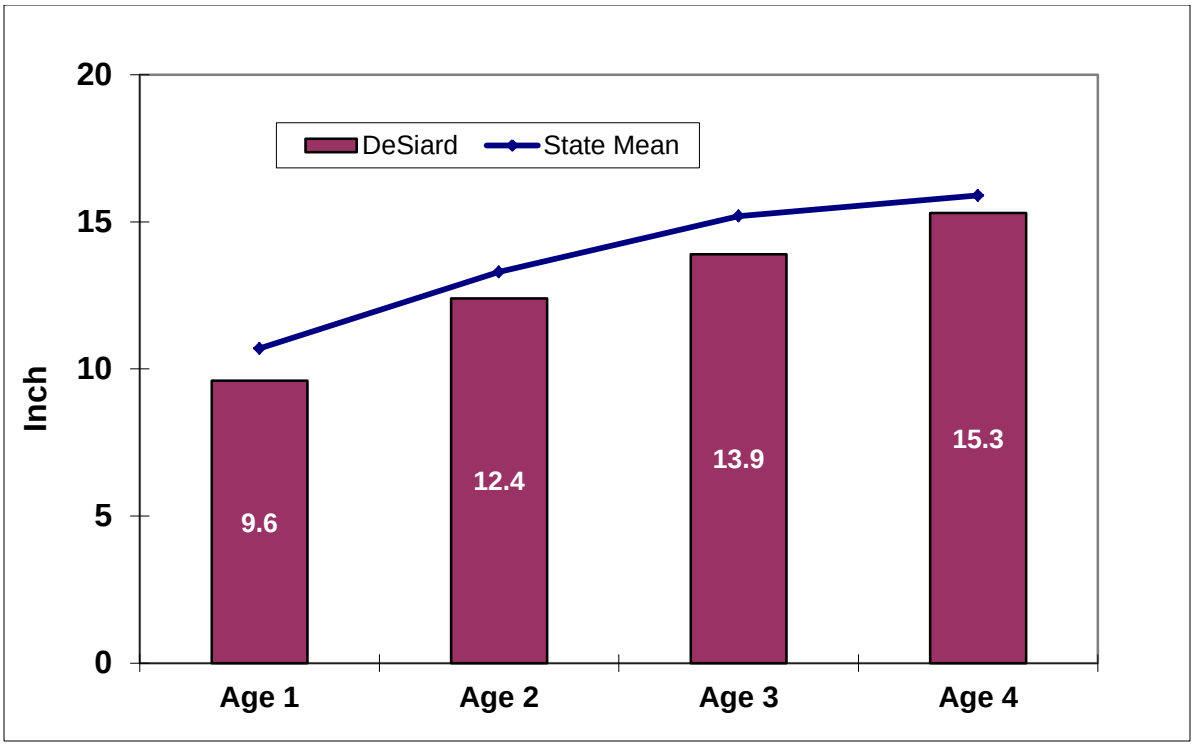

Figure 8. Mean length at capture of largemouth bass for ages 1+ – 4+ from Bayou DeSiard, LA in 2000.

Forage

Forage availability is measured through shoreline seine sampling and indirectly through measurement of largemouth bass body condition or relative weight. Relative weight (Wr) is the ratio of fish weight to the weight of a ‘‘standard’’ fish of the same length. The index is calculated by dividing the weight of a fish by the standard weight for its length, and multiplying the quotient by 100. Low largemouth bass relative weights below 80 indicate a potential problem with forage availability. The chart below (Figure 9) shows that relative weights have been ideal for each sample. This data was calculated from lengths and weights gathered from fall electrofishing samples. Lower bass densities since 2002 (as portrayed in the spring electrofishing chart) could explain a recent increase in relative weights, since competition for forage may be reduced. No data is included for the 2013 sample, as the sample size was very low. Sunfish *Lepomis spp.*, shads *Dorosoma spp.*, and silversides *Labidesthes sicculus* have been identified as primary bass forage species in Bayou DeSiard.

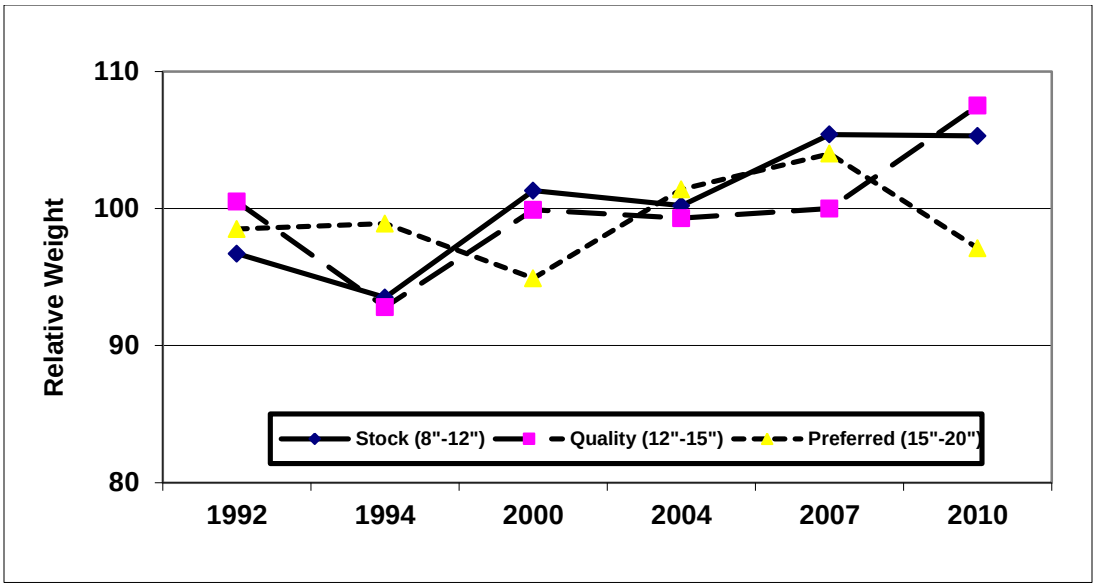

Figure 9. Relative weight (Wr) of stock-, quality-, and preferred-size largemouth bass from fall electrofishing in Bayou DeSiard, LA 1992 – 2010.

Crappie

Bayou DeSiard crappies (*Pomoxis spp.)* have not been intensively sampled in. Both black *P. nigromaculatus* and white *P. annularis* crappie occur in Bayou DeSiard. Black crappies are more abundant. Crappie populations are very sensitive to environmental conditions such as temperature and water levels, and recruitment can be notoriously inconsistent. Rotenone sampling conducted from 1959 – 1964 revealed a mean total of 3.8 crappie per acre. The following chart (Figure 10) shows the mean number of black and white crappie over 7 inches per acre from prior rotenone samples.

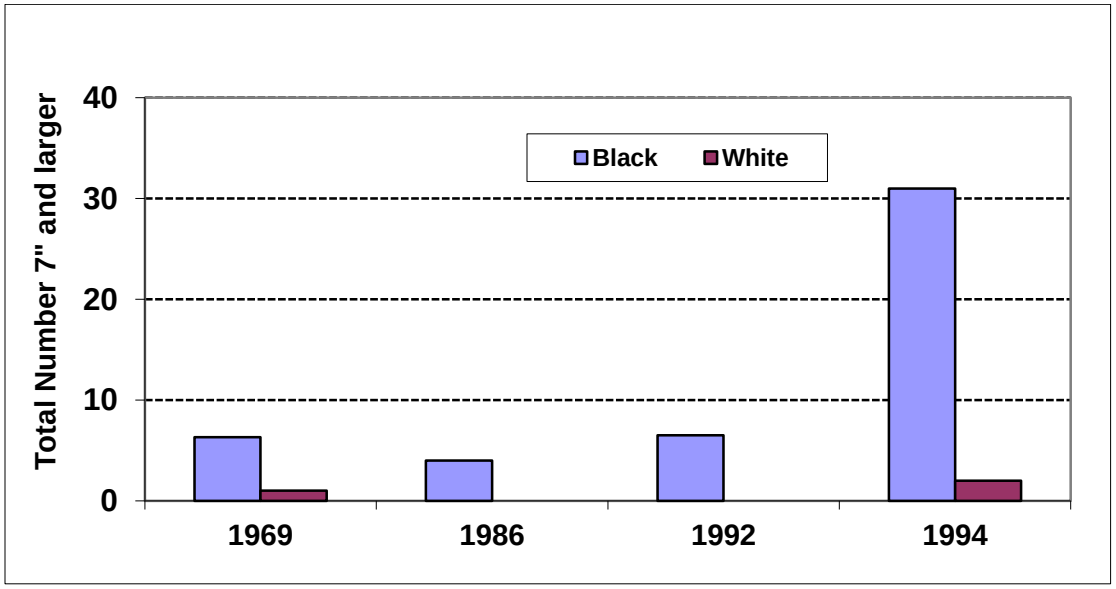

Figure 10. Total catch of crappie greater than seven inches total length from biomass (rotenone) samples for Bayou DeSiard, LA in 1969, 1986, 1992, and 1994.

Lead nets were first used to sample crappie in Bayou DeSiard in the fall of 2014. Sampling was conducted at three locations. The overall CPUE (crappie per hour) was 0.613 (n = 147). Eighty-seven percent of the crappies sampled were black crappie. The chart below (Figure 11) shows the distribution of both species combined. The sample was comprised mostly of small crappie (< 8 inches), with very few considered to be a harvestable size. This distribution likely indicates a successful spawn and recruitment year in 2013 or 2014.

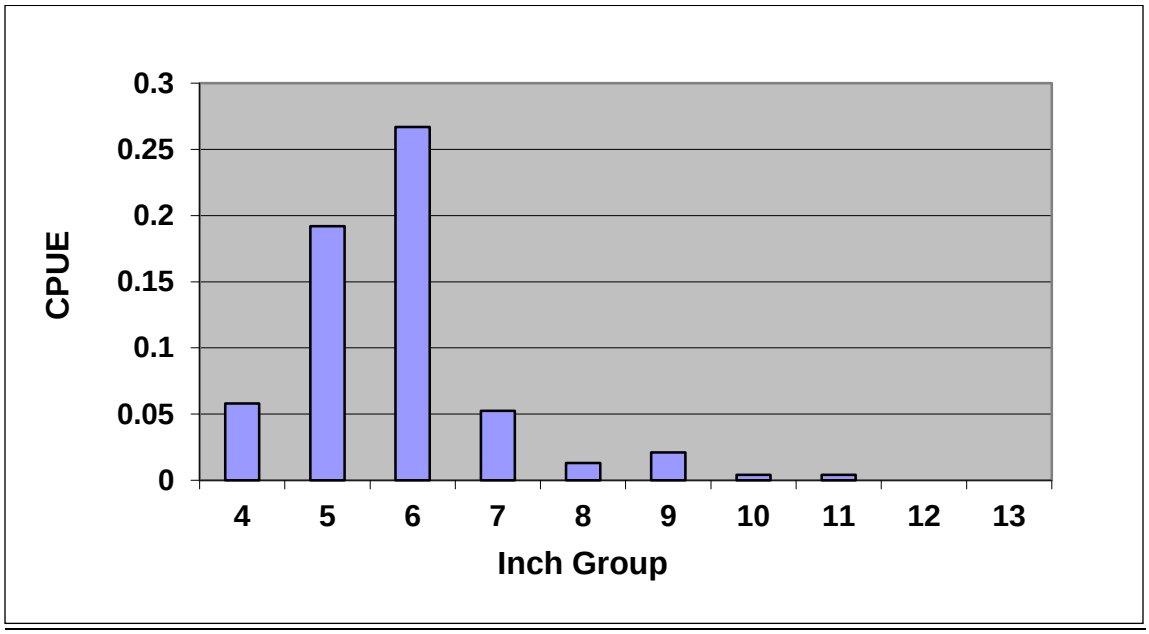

Figure 11. Length distribution of crappie from lead net sampling in Bayou DeSiard, 2014

Commercial

Commercial fishing has been confined to the portion of Bayou DeSiard south of Shorty Payne Rd. since 1994 when grass carp were stocked. There is currently little commercial activity on Bayou DeSiard. Preferred commercial species include bigmouth *Ictiobus cyprinellus*, black *I. niger* and smallmouth buffalo *I. bubalus*, and channel catfish *Ictalurus punctatus*. Annual rotenone samples from 1959 – 1964 showed an average of 55 lbs. of buffalo per acre sampled. The last 3 rotenone samples were conducted in 1986, 1992, and 1994. Pounds of buffalo per acre were 186, 1, and 37 respectively. Common carp *Cyprinus carpio* and freshwater drum *Aplodinotus grunniens* are also present. None of these species appear to be found in numbers necessary for a sustainable commercial fishery. Figure 12 presents the CPUE for various species from 4 gill net samples conducted in the 1990's. CPUE is defined as the catch per 100 ft. of net per net night. The last 2 gill net samples (2009, 2013) captured 2 common carp, 2 buffalo, and 2 channel catfish.

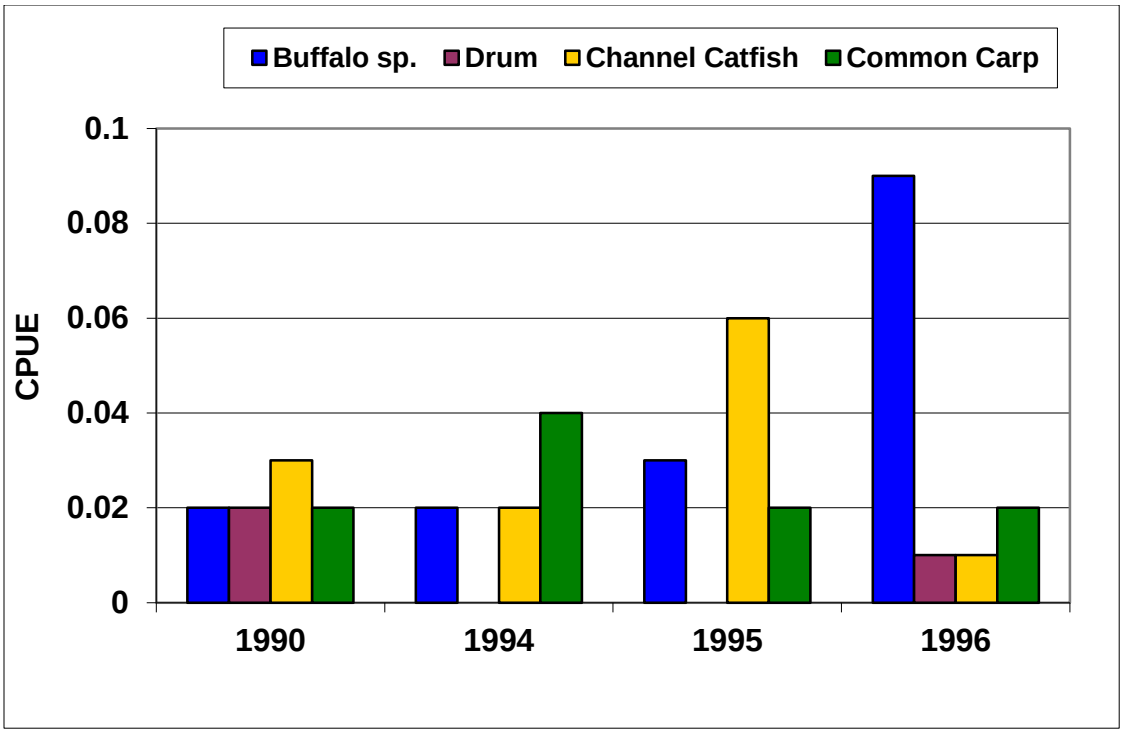

Figure 12. Catch per unit effort (CPUE) of commercial species captured in gill nets from Bayou DeSiard, LA in 1990, 1994, 1995, and 1996.

RECREATIONAL ANGLER SURVEYS (CREEL)

Creel surveys were conducted on Bayou DeSiard in 1959 and 1962. The estimated number of angler trips on Bayou DeSiard for those years was 28,638 and 34,533, respectively. Results from the 1962 creel indicated that 92% of the anglers were successful. Bluegills were by far the most common species observed, constituting 65% of the fish checked. Crappie (25%), other sunfish (8%), and largemouth bass (2%) were also harvested in significant numbers. The average weight of largemouth bass kept by anglers was 1.51 pounds. Past estimates of fishing pressure exceeded current observations. Reasons for this disparity include: increased number of water bodies for anglers to choose from, decreased popularity of fishing, and decreased angler access. Angler access has declined significantly since these surveys were conducted. Much of the shoreline is now residential, with very limited or no public access to the lower sections of Bayou DeSiard. Shoreline fishing opportunities are also limited along the entire length of the water body.

HABITAT EVALUATION

Figures 13, 14, and15 show the variability in habitat between the northern and southern halves of Bayou DeSiard. The southern portion of Bayou DeSiard is considerably wider and deeper and has very few cypress trees growing beyond the shoreline. Much of the northern

end resembles a forested swamp, especially the portion north of the Louisiana Department of Wildlife and Fisheries (LDWF) District 2 office.

Figure 13. Aerial photo of southern end of Bayou DeSiard.

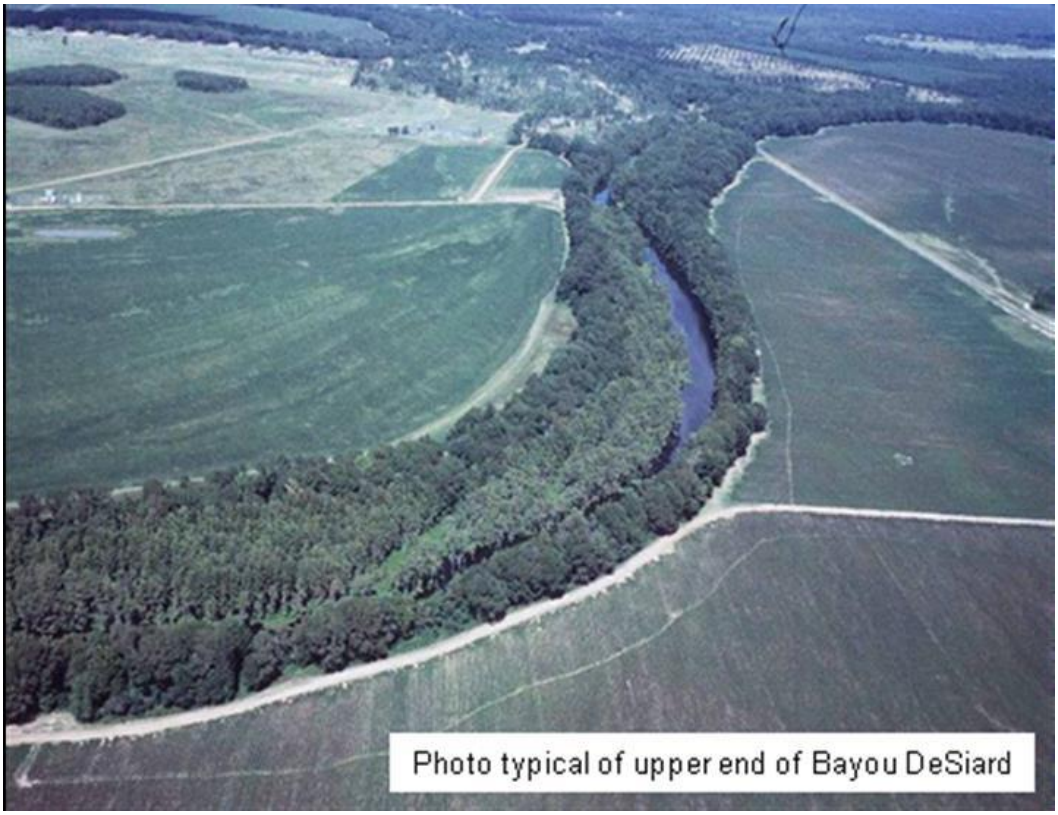

Figure 14. Aerial photo of northern end of Bayou DeSiard.

Figure 15. Aerial photo showing recent residential development on northern end of Bayou DeSiard.

Aquatic Vegetation

The northern half of Bayou DeSiard is comprised of habitat conducive to overabundant aquatic vegetation. Water hyacinth (*Eichhornia crassipes*) and duckweed (*Lemna spp.*) often form extensive mats in the northern reaches that reduce water quality by creating hypoxic conditions. Dense stands of bald cypress (*Taxodium distichum*) impede flow and provide protection for nuisance vegetation. Agricultural sedimentation has led to a decrease in depth, forming shallow areas that impede water flow. There are also several bridges that constrict water flow, resulting in upstream accumulation of floating plants. The predominant submersed species in Bayou DeSiard are fanwort (*Cabomba caroliniana*) and coontail (*Ceratophyllum demersum*). These species form dense mats at times in the upper end. In contrast to the upper end of Bayou DeSiard (Figure 16), habitat conditions in the lower reaches include deeper water and fewer trees. Aquatic vegetation in the lower end is seldom problematic and typically is confined to a shoreline fringe. However, in the spring of 2012, a severe and problematic infestation of coontail was developed in the section between Bon Aire Drive and Midway Dam. The University of Louisiana Monroe (ULM) waterski training area is located in that stretch. LDWF treated the area in the immediate vicinity of the waterski area with a surface and subsurface application of diquat dibromide at a rate of 1 gal/acre. By mid-June, the infestation had subsided. Overabundant aquatic vegetation is expected to remain problematic in Bayou DeSiard until the conditions that cause the problem (shallow areas, dense forests, man-made constrictions) are addressed.

Figure 16. Photo portraying habitat typical of the northern end of Bayou DeSiard.

Substrate

The natural substrate of the bayou is mostly clay, typical of a low order stream in the Ouachita River Basin. Since impoundment in the 1930's, agricultural erosion, urban runoff, and senescence of aquatic vegetation have influenced the substrate composition. Silt and organic material has settled in much of the upper end of Bayou DeSiard and has resulted in poor spawning substrate for nesting fish species.

Vegetation Type Maps

Type map surveys of aquatic vegetation were conducted for Bayou DeSiard during the summer months in 2012, 2013, and 2014. The most recent survey (2014) is included in Appendix A. Results of the previous two surveys are included in Bayou DeSiard MP-C (archives). Vegetation type maps are scheduled to continue through 2017 to document changes to the aquatic plant community as a result of recent control efforts, including grass carp introductions and/or herbicide treatments. The location and abundance of aquatic vegetation coverage is documented during the surveys. The following is a summary of the 2014 survey: vegetation coverage was considered to be desirable and not problematic from the railroad crossing at Black Bayou south to the L-11 canal and also in the Lakeshore section (Bon-Aire Dr. – Midway Dam). Sections of Bayou DeSiard south of Bon-Aire Dr. were not surveyed due to historical and recent observations, which have indicated very little vegetative growth. Much of Bayou DeSiard north of the Black Bayou railroad crossing is shallow with dense growth of fanwort to depths of five feet. Much of this section is also

covered with duckweed and mosquitofern (*Azolla caroliniana*). This problematic area stretches for nearly 11 miles, with the exception of the deeper area at Frenchman's Bend. Grass carp were stocked in 2013, though there is no apparent reduction in submerged aquatic vegetation (SAV) yet. Other emergent species were present, though not problematic, rarely forming large mats. It should be noted that hydrilla (*Hydrilla verticillata)* has not been observed, though it is abundant in upstream (and connected via culvert) Lake Bartholomew.

CONDITION IMBALANCE / PROBLEM

Most problems associated with Bayou DeSiard are of anthropomorphic origin. The stream has been dammed at both ends and has several additional dams to further restrict water flow and public access. The habitat problems caused by the series of actions are outlined in MP-A, and in the Aquatic Vegetation section above. Electrofishing results consistently indicate a direct relationship between largemouth bass abundance and habitat quality. Reduced sportfish abundance may be attributed to habitat problems in the northern portion of Bayou DeSiard.

The current habitat in the northern portion of Bayou DeSiard is conducive to excessive production of aquatic vegetation. The area serves as a production area for floating species (duckweed, water hyacinth) that eventually drift and impact shoreline residents downstream to the L-11 canal. Submerged species such as coontail and fanwort are also viewed as problematic in this area as well.

Actions necessary to achieve success would include all of the following:

1. Removal of water flow restrictions
    a. Widening of bridge spans
    b. Dredging shallow sediment deposits
2. Increasing extent to which the upper end can be dewatered

The lack of significant drawdown capability and the lake's primary purpose as a municipal water source limits the use of water level manipulation as a vegetation management tool. The potential for water level fluctuation has become very limited, as the city has recently begun operation of pumps more frequently to maintain Bayou DeSiard at near pool stage year around. The practice of near-continuous pumping also negates the use of systemic herbicides (ex. Sonar, Galleon) that require extended periods of contact time with little water exchange.

Applications of foliar herbicides currently are the primary control measure available for emerged and floating aquatic vegetation in Bayou DeSiard. Herbicide applications also have limiting factors. Louisiana Department of Agriculture restrictions prohibit the application of 2,4-D from March 15 through September 15. Access to spray boats is also limited due to shallow water and tree stem density. Other obstacles in vegetation control include:

1. pipeline crossings which impede flow and may prevent future dredging
2. limited drawdown capability
3. private and agricultural irrigation concerns
4. regulations pertaining to the city's water supply
5. near continuous pumping by the City of Monroe to maintain Bayou DeSiard near pool stage prevents use of certain systemic herbicides which require prolonged exposure to control vegetation

Public access south of the L-11 Canal and Fink's Hideaway Rd. crossing is very limited. There is no public access to two sections south of this crossing: L-11 canal to Midway Dam, and the section between U.S Hwy. 165 and Bon Aire Drive, where a barricade has been recently placed to prevent vehicle access to an unimproved dirt ramp on the U.S. 165 right-of-way. The large section south of Midway Dam has public access by only one privately owned ramp. The large section west of U.S. 165 is also only accessed by an unimproved dirt launch on private property.

An increasing number of residents building homes along the northern shorelines of Bayou DeSiard has resulted in an increase in vegetation complaints and increased interest in solving these chronic problems.

RECOMMENDATIONS

Cooperate with any efforts to address habitat problems on the upper end of Bayou DeSiard including: removal of adequate number of cypress trees to increase flow, widening of railroad and road constrictions, dredging or raising the water level to reduce shallow areas, and increasing the drawdown potential to reduce plant growth on the upper end (Corps of Engineers, Vicksburg District Draft, 2007).

Source: March 2007. Draft of the Ecosystem Restoration Report with Environmental Assessment for Bayou DeSiard, Monroe, LA. U.S. Army Corps of Engineers, Vicksburg District. (Available at District 2 office).

Locate potential sites for increased angler access, including boat ramps or fishing piers, especially in the sections where public access is limited. Currently, there are plans to improve and increase trailer capacity at the Fish Hatchery ramp. Dedication of an area for shoreline anglers should also be investigated for this location. (UPDATE August 2012): An application by the City of Monroe for federal assistance via Sportfish Restoration funding had recently been denied. The City will reapply for funding. Asphalt was applied by the city to improve the parking area and the ramp in July 2012.

Prioritize herbicide applications to nuisance vegetation, giving highest priority to floating and emergent species that may become a risk to fish and wildlife, where navigation by boat is impeded, and when coverage becomes a nuisance to homeowners. Treatments will be made by spray pump surface application of appropriate herbicides and surfactants. Duckweed will be treated with diquat dibromide at a rate of 1 gallon per acre. Other nuisance emergent/floating vegetation should be treated as required with use of the following herbicides: 2,4-D (except during the time period 3/15 – 9/15) at 0.5 gal/acre for water hyacinth, and American lotus; glyphosate at 0.75 gal/acre for American lotus, water pennywort, and parrot feather. Triclopyr (Renovate®) and imazapyr (Habitat®) may be more effective on alligator weed, primrose, and parrot feather but have irrigation restrictions. Ammonium salt of imazamox (Clearcast®) may be used near residential areas and pump intakes.

The area in the immediate vicinity of the Bartholomew-DeSiard control structure at the upper end should be monitored at least once a month for the presence of hydrilla. If found, it should be immediately treated with a subsurface application of Cutrine Plus® chelated copper algaecide and diquat dibromide mixed at a 3:2 ratio, applied at a rate of 5.5 gal.'s per surface acre. An application of granular endothall in the area may also be conducted.

Monitor and document the impacts of the recently introduced grass carp. Type map surveys will be conducted through at least 2017.

APPENDIX A

2014 Aquatic Vegetation Type Map

Bayou DeSiard Type Map Survey - 2014

7/30/14, 8/6/14, 8/17/14

A type map survey of aquatic vegetation was performed by Inland staff biologists Ryan Daniel and Chase McPherson during July and August of 2014. Water level was near pool stage. Notes of observations were taken and depictions were made on a map. The attached field map should be used to identify areas depicted in the following summary. The survey was not conducted in the sections between Midway Dam and L-11 canal, and Hwy. 165 to Bon-Aire because of no public access. The portion of Bayou DeSiard west of Hwy. 165 was not surveyed due to historic absence of aquatic vegetation in this area.

June 30, 2014

A. Office to Shorty Payne: fanwort in shallows to depths of 7 ft., mostly in trees, duckweed and *Azolla* matted along shoreline, alligator weed on west shore just below Shorty Payne Bridge, very little emergent vegetation.

B. Shorty Payne to RR Bridge: duckweed and *Azolla* along shore, SAV not apparent and not reaching surface (depths > 7 ft.)

C. and D. RR bridge to RR bridge: near solid duckweed and *Azolla* (avg. 85% coverage), max. depth in this area is 5 ft., very little SAV in lower (C) section, though fanwort becomes dense near Mill Bayou, some alligator weed mats across channel in D, also some parrot feather, pennywort, and water hyacinth

E. South Frenchman's Bend: deeper channel, duckweed and alligator weed along shore and in trees only, very little SAV in mid-channel

F. Frenchman's Bend north of highline: shallower, fanwort growing across channel, 80% coverage of duckweed and *Azolla*, more watermeal than duckweed closer to Hwy. 134 bridge

August 6, 2014

G. and H. Hwy. 134 Bridge to highline crossing: fanwort dense, mostly watermeal on surface (80% coverage) in G, more filamentous algae on surface in H, some alligator weed, primrose and parrot feather in trees

I. Upper end: very little SAV, small patches of alligator weed and primrose, very little duckweed and watermeal, large patch of alligator weed (1,000 ft^2) at culvert, some coontail at culvert, no problematic vegetation in this area

Office to L-11 canal: water lily and primrose along west shoreline from office to Treasure Isle bridge, scattered duckweed, fanwort dense in shallows, scattered patches of water lily on east shore below T.I. bridge, no SAV visible below RR bridge, very little duckweed between RR bridge and L-11

August 17, 2014

Midway Dam to Bon-Aire Dr.: scattered coontail in shallow, some with algae on surface, few small mats of primrose, no significant nuisance coverage, total veg. coverage in this section was less than 5%

SUMMARY

At the time of the survey, vegetation coverage was considered to be desirable and not problematic from railroad crossing at Black Bayou south to the L-11 canal and also in the Lakeshore section (Bon-Aire Dr. – Midway Dam). Much of Bayou DeSiard north of the Black Bayou railroad crossing is shallow with dense growth of fanwort to depths of five feet. Much of this section is also covered with duckweed and *Azolla*. This problematic area stretches for nearly 11 miles, with the exception of the deeper area at Frenchman's Bend. Grass carp were stocked in 2013, though there is no apparent reduction in SAV yet. Other emergent species were present, though not very problematic, rarely forming large mats. It should be noted that no hydrilla has been observed, though it is abundant in upstream (and connected via culvert) Lake Bartholomew.

*field notes and map included in Bayou DeSiard MP-C